

ART. II.—*On a Sygnathus from Hobson's Bay.* By LUDWIG BECKER, Esq.

WHILE occupied in Hobson's Bay in completing my observations about the fish which I have described in the preceding paper, I found, amongst many others in a fish net, a small pipe fish (*Sygnathus*).

This fish, like the preceding, lives among the sea plants; it is of a brown colour, with vertical stripes of the finest blue. The pectoral fin has ten, the dorsal twenty-five, and the caudal fin nine rays, all of them soft. The body is entirely covered by scale-like plates in sixty-one divisions.

Fig. 1 represents a female with eggs. The eggs are about one-sixteenth of an inch in diameter; they are deposited for fecundation in a pouch attached to the male (Fig. 2) at the junction of the body and tail. In this pouch, which is open and about one inch long, the eggs are developed; the young remaining in it till they are able to swim. In the pouch of the specimen which I obtained were thirty-three foetuses, one of which I sketched, and it is represented, considerably magnified, in Fig. III.

The young were of a white colour, sprinkled over with black dots. The head is very thick, but the muzzle is not prolonged as in the parent fish. The remainder of the eggs are attached to the belly, forming as it were a kind of placenta. The dorsal and caudal fins were already developed, but the pectoral fin was not. The eyes of the young ones are very large and projecting. The specimen which I examined (by the microscope) dried up during my observations; the round worm-like body had shrunk and withered, and with the exception of the head and belly, had assumed almost as perfect a shape as that of the full grown fish.

The foetuses above described were about half an inch long; they lay closely together in the paternal pouch, being slightly attached to the skin.

For the sake of illustration I have placed the different sections of the body (of full grown specimens) underneath their respective parts.

Although naturalists are well aware of the existence of pouch-bearing fishes, yet as the specimen which I now present to the Philosophical Institute may belong to a new species, I hope that this preliminary and imperfect notice may be accepted with kind indulgence.\*

Melbourne, 5th September, 1855.

\* I have since found other species of pouch-bearing *Sygnathi* in the same locality. January 1857. L. B.